

Advances in Mobility Management for IP Networks

Editors:

Aisha Hassan Abdalla Hashim

Othman Khalifa

Shihab A. Hameed



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EMAIL: iiumprinting@yahoo.com

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THE STUDY OF MULTICAST LISTENER DISCOVERY

AISHA HASSAN ABDALLA HASHIM¹, IMAD FAKHRI TAHA ALSHAIKHLI, AZANA
HAFIZAH MOHD AMAN AND SELAMI ALI

*ECE Dept, Fac. of Eng., International Islamic Univ. Malaysia (IIUM), Jalan Gombak, 53100
Kuala Lumpur, Malaysia*

aisha@iiu.edu.my¹

5.1 INTRODUCTION

Multicast Listener Discovery is a protocol used to discover multicast listeners. It determines group membership on a network segment in a multicast mobility environment. Multicast Listener Discovery (MLD) [1] is a component of the IP version 6 (IPv6) suites. MLD is used by IPv6 routers to discover multicast listeners and to determine group membership on a network segment.

A network segment is also known as a link or subnet on a directly attached link, much as Internet Group Management Protocol (IGMP) is used in IPv4. The protocol is embedded in Internet Control Message Protocols version 6 (ICMPv6) [2] instead of using a separate protocol. The protocol is fully described in RFC 3810.

Multicast traffic is sent to a single address but is processed by multiple hosts. Only host computers that belong to the multicast group receive and process traffic sent to the group's reserved address. The set of hosts listening on a specific multicast address is called a multicast group. MLDv6 usage and extension is described by Ilka Miloucheva, and Karl Jonas [3]. Fig. 1 shows the MLD format used in [3].

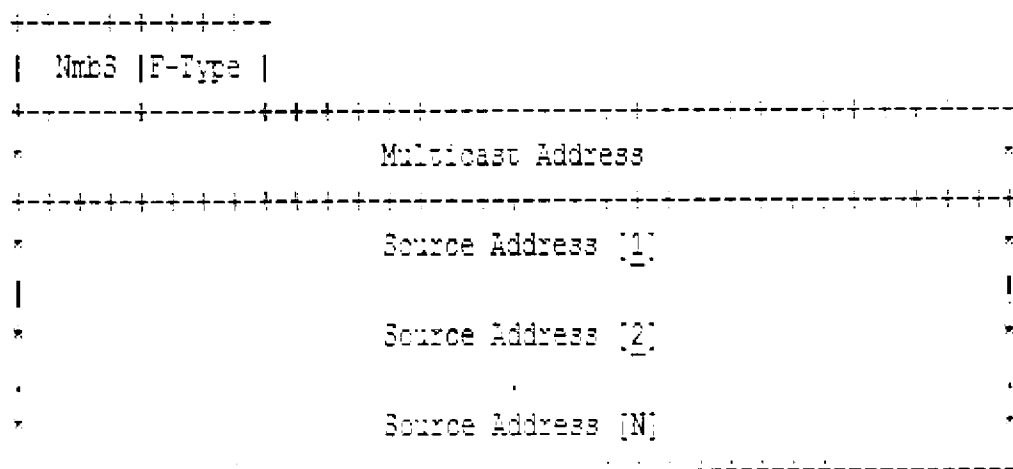


Fig. 5.1: Multicast Listener [3].